

ABSTRACT

A contactless acceleration switch detects a threshold acceleration value when a mass attached to a spring, moves towards a source, a drain, and a threshold adjustment channel implanted in a substrate layer. The threshold adjustment channel is located between the source and the drain. The implanted area is located between insulator posts. A spring is attached to the insulator posts. A mass is held above the implanted area by the spring. When the threshold acceleration value is detected, the mass moves towards the substrate layer. The threshold adjustment channel then inverts causing current to flow between the source and the drain, providing an electrical signal indicating that the threshold acceleration value has been reached.